CLAIMS:

1. An electrode fluid distributor, comprising:

a fluid passageway comprising a plurality of segment pairs each comprising an inlet segment and an adjacent outlet segment with a baffle disposed therebetween, wherein said inlet segments are in fluid communication with an inlet, subsequent inlet segments, and adjacent outlet segments, and said outlet segments are in fluid communication with an outlet and subsequent outlet segments.

2. The electrode fluid distributor as set forth in Claim 1, wherein said segment pairs are defined by walls disposed between adjacent inlet segments and adjacent outlet segments and by sidewalls disposed between adjacent segment pairs, wherein the baffle has at least a baffle portion having a height less than a sidewall height, said baffle portion disposed at a baffle second end opposite a baffle first end, and wherein the baffle first end is disposed adjacent a wall first end.

3. The electrode fluid distributor as set forth in Claim 2, wherein said walls have a wall portion having a height less than said sidewall height, said wall portion disposed at the wall first end, and wherein the wall first end is disposed adjacent a sidewall first end.

4. The electrode fluid distributor as set forth in Claim 3, wherein said walls further comprise a plurality of first openings disposed therethrough.

5. The electrode fluid distributor as set forth in Claim 4, wherein the segment pairs have a width, which remains substantially constant along a fluid passageway length.

6. The electrode fluid distributor as set forth in Claim 3, wherein said wall height varies between adjacent segment pairs.

7. The electrode fluid distributor as set forth in Claim 4, wherein the segment pairs have a segment pair length, which remains substantially constant along a fluid passageway length.

8. The electrode fluid distributor as set forth in Claim 1, further comprising a plurality of the fluid passageways.

10. The electrode fluid distributor as set forth in Claim 1, wherein the fluid passageway is at least partially configured with a turn.

11. The electrode fluid distributor as set forth in Claim 1, wherein the fluid passageway is at least partially configured with a plurality of turns.

12. The electrode fluid distributor as set forth in Claim 11, wherein the plurality of turns forms a labyrinth.

13. A solid oxide fuel cell comprising:

a first electrode;

a second electrode;

an electrolyte between said first electrode and said second electrode;

a separator disposed on a side of said first electrode opposite said electrolyte; and

an electrode fluid distributor disposed between said separator and said first electrode, and at least in partial physical contact with said first electrode, said interconnect comprising a fluid passageway comprising a plurality of segment pairs each comprising an inlet segment and an adjacent outlet segment with a baffle disposed therebetween, wherein said inlet segments are in fluid communication with an inlet, subsequent inlet segments, and adjacent outlet segments, and said outlet segments are in fluid communication with an outlet and subsequent outlet segments.

14. The solid oxide fuel cell as set forth in Claim 13, wherein said segment pairs are defined by walls disposed between adjacent inlet segments and adjacent outlet segments and by sidewalls disposed between adjacent segment pairs, wherein the baffle extends from the separator toward the first electrode and further comprises a first baffle opening disposed adjacent said first electrode.

15. The solid oxide fuel cell as set forth in Claim 14, wherein said baffle comprises a plurality of second baffle openings disposed therethrough.

16. The solid oxide fuel cell as set forth in Claim 14, wherein said walls extend from said first electrode toward said separator and comprise a first wall opening disposed adjacent said separator.

17. The solid oxide fuel cell as set forth in Claim 16, wherein said walls further comprise a plurality of second wall openings disposed therethrough.

18. The solid oxide fuel cell as set forth in Claim 13, wherein said electrode fluid distributor further comprises a plurality of the fluid passageways.

19. The solid oxide fuel cell as set forth in Claim 13, wherein said fluid passageway comprises turn selected from the group consisting of a continuous curved bend, a non-continuous curved bend, a discreet bend and combinations comprising at least one of the foregoing turns.

20. The solid oxide fuel cell as set forth in Claim 19, wherein the fluid passageway forms a spiral configuration.

21. A method of moving a gas in a solid oxide fuel cell, comprising:

passing the gas through an inlet of an electrode fluid distributor disposed between a separator and an electrode;

contacting an electrode first portion with a first portion of the gas;

passing a remainder of said gas between a wall and the separator;

reacting said first portion of gas to form a spent gas;

passing said spent gas between a baffle and the electrode to an electrode second portion; and

passing said spent gas through an outlet of the electrode fluid distributor.

22. The method as set forth in Claim 21, wherein an oxygen partial pressure across the electrode is less than or equal to about 10^{-14} atmospheres.

23. A method for operating a fuel cell, comprising:

introducing an oxidant to the fuel cell;

converting the oxidant to oxygen ions;

transferring the oxygen ions across an electrolyte to an electrode;

introducing fuel through an inlet of an electrode fluid distributor disposed between a separator and the electrode;

contacting an electrode inlet portion with a first portion of the fuel;

reacting the fuel with the oxygen ions to product electrons and spent fuel;

passing said spent fuel between a baffle and the electrode to an electrode outlet portion; and

passing said spent fuel through an outlet of the electrode fluid distributor.

24. The method as set forth in Claim 23, wherein an oxygen partial pressure across the electrode is less than or equal to about 10^{-14} atmospheres.

25. The method as set forth in Claim 23, further comprising passing a remainder of said fuel to subsequent electrode inlet portions.

26. The method as set forth in Claim 23, wherein greater than or equal to about 50% of said spent fuel passes to said electrode outlet portion.